

11-17-03

27

Renumbered

WHAT IS CLAIMED IS:

1. An antibody directed against a nuclear matrix protein or an immunogenic fragment thereof in a human subject, wherein said protein is absent in normal renal cells but present in cancerous renal cells and is selected from the group consisting of:

(a) RCCA-1 having a molecular weight of about 53 kD and a pI of about 9.30;

(b) RCCA-2 having a molecular weight of about 32 kD and a pI of about 6.95;

(c) RCCA-3 having a molecular weight of about 27 kD and a pI of about 6.50;

(d) RCCA-4 having a molecular weight of about 20 kD and a pI of about 5.25; and

(e) RCCA-5 having a molecular weight of about 15 kD and a pI of about 6.00 or an immunogenic fragment thereof.

2. A method for detecting a cell proliferative disorder in a human subject, comprising contacting a cellular component from said subject with said antibody of claim 1, which binds to a cellular component associated with a cell proliferative disorder, and detecting whether or not the antibody binds to the cellular component.

3. The method of claim 2, wherein said antibody is polyclonal.

4. The method of claim 2, wherein said antibody is monoclonal.

5. The method of claim 2, wherein said antibody is detectably labeled.

6. The method of claim 5, wherein said label is selected from the group consisting of a radioisotope, a bioluminescent compound, a chemiluminescent compound, a fluorescent compound, a metal chelate, and an enzyme.

7. The method of claim 2, wherein said cellular component is taken from the subject's kidney.

8. The method of claim 2, wherein said cellular component is a protein.

9. An antibody directed against a nuclear matrix protein or an immunogenic fragment thereof that is present in normal human renal cells but absent in cancerous human

10-7/13/49

renal cells, wherein said protein is RCNL-1 having a molecular weight of about 103 kD and a pI of about 8.30 or an immunogenic fragment thereof.

10. A method for detecting a cell proliferative disorder in a human subject, comprising contacting a cellular component from said subject with said antibody of claim 9, which binds to a cellular component associated with a cell proliferative disorder, and detecting whether or not the antibody binds to the cellular component.

11. The method of claim 10, wherein said antibody is polyclonal.

12. The method of claim 10, wherein said antibody is monoclonal.

~~13.~~ 14. The method of claim 10, wherein said antibody is detectably labeled.

~~14.~~ 15. The method of claim 13, wherein said label is selected from the group consisting of a radioisotope, a bioluminescent compound, a chemiluminescent compound, a fluorescent compound, a metal chelate, and an enzyme.

~~15.~~ 16. The method of claim 10, wherein said cellular component is taken from the subject's kidney.

~~16.~~ 17. The method of claim 10, wherein said cellular component is a protein.